

**REMARKS**

This responds to the Office Action dated January 12, 2007.

Claim 46 is amended. Claims 1-55 remain pending in this application.

**§102/§103 Rejection of the Claims**

Claims 1-6, 9-11, 13-16, 19-20, 23-26, 28-34, 38-40, 44-46, 51-53 and 55 were rejected under 35 U.S.C. §102(e) for anticipation by Daum et al. (U.S. Patent No. 7,101,339, herein “Daum”) or, in the alternative, under 35 U.S.C. §103(a) as obvious over Daum in view of Hine et al. (U.S. Patent no. 7,142,919, herein “Hine”).

**§103 Rejection**

Regarding the obviousness rejection, Applicant respectfully submits that Daum is not available for combination in obviousness rejections pursuant to 35 U.S.C. §103(c). Applicant respectfully submits that the assignments on record for the present application and Daum provide evidence of the requisite obligation of assignment to avoid their combination in a rejection under 35 USC § 103(c).

The claimed invention of the present Application (U.S. Serial No. 10/696,729) and Daum (U.S. Serial No. 10/319,794) were, at the time the claimed invention of the present Application was made, owned by Cardiac Pacemakers, Inc, by nature of the assignments executed and filed for both of these applications. The assignment for U.S. Serial No. 10/696,729 was recorded on March 22, 2004 on Reel 015118, Frames 0597, with the United States Patent and Trademark Office. The assignment for U.S. Serial No. 10/319,794 was recorded on April 28, 2003 on Reel 013997, Frames 0490, with the United States Patent and Trademark Office.

Thus, Applicant submits that claims 1-6, 9-11, 13-16, 19-20, 23-26, 28-34, 38-40, 44-46, 51-53 and 55 are patentable pursuant to 35 U.S.C. §103(c). See MPEP §§706.02(I)(1)-(2). In making this procedural traversal, Applicant does not address the arguments of record with respect to the obviousness rejection and reserves the right to traverse same if the procedural traversal is not accepted.

Applicant respectfully requests reconsideration and allowance of claims 1-6, 9-11, 13-16, 19-20, 23-26, 28-34, 38-40, 44-46, 51-53, and 55.

**§102 Rejection**

***Claim 1***

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a *prima facie* case of anticipation because the cited portions of Daum do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Daum, among other things, a teaching or suggestion of a processor adapted to identify a relationship between first impedance information and second impedance information and adapted to generate a code as a function of the relationship between the first impedance information and the second impedance information, as recited in claim 1.

The Office action does not indicate, and Applicant is unable to find in Daum, that the alleged processor of Daum generates the code as the function of the relationship as recited in claim 1. The Office Action states, in paragraph 7, that “Daum discloses a system that includes ... a processor adapted to identify the relationship between impedances ... (Col. 1, l. 67 & Col. 2, ll. 3-11)”. However, Applicant is unable to find this alleged relationship from the cited portions of Daum. A clarification in the next official communication is respectfully requested, or withdrawal of the rejection is believed appropriate.

Applicant respectfully requests reconsideration and allowance of claim 1.

***Claims 2-6 and 9-10***

Applicant respectfully traverses the rejection. Claims 2-6 and 9-10 are dependent on claim 1, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 1 is incorporated herein to support the patentability of claims 2-6 and 9-10.

Applicant respectfully requests reconsideration and allowance of claims 2-6 and 9-10.

***Claim 11***

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a *prima facie* case of anticipation because the cited portions of Daum do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Daum, among other things, a teaching or suggestion of a processor adapted to evaluate the signal

received from each sensor and calculate a confidence level as a function of the signal received from each sensor, as recited in claim 11.

More specifically, Applicant is unable to find in the cited portions of Daum a teaching or suggestion of a processor adapted to calculate a confidence level.

Applicant respectfully requests reconsideration and allowance of claim 11.

*Claim 13*

Applicant respectfully traverses the rejection. Claim 13 is dependent on claim 11, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 11 is incorporated herein to support the patentability of claim 13.

Applicant respectfully requests reconsideration and allowance of claim 13.

*Claim 14*

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a *prima facie* case of anticipation because the cited portions of Daum do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Daum, among other things, a teaching or suggestion of a processor adapted to identify a relationship between a first signal and a second signal and generate a code as a function of the relationship, as recited in claim 14.

The Office action does not indicate, and Applicant is unable to find in Daum, that the alleged processor of Daum generates the code as the function of the relationship as recited in claim 14. The Office Action states, in paragraph 7, that “Daum discloses a system that includes ... a processor adapted to identify the relationship between impedances ... (Col. 1, l. 67 & Col. 2, ll. 3-11)”. However, Applicant is unable to find this alleged relationship from the cited portions of Daum. A clarification in the next official communication is respectfully requested, or withdrawal of the rejection is believed appropriate.

Applicant respectfully requests reconsideration and allowance of claim 14.

*Claims 15-16 and 19-20*

Applicant respectfully traverses the rejection. Claims 15-16 and 19-20 are dependent on claim 14, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 14 is incorporated herein to support the patentability of claims 15-16 and 19-20.

Applicant respectfully requests reconsideration and allowance of claims 15-16 and 19-20.

*Claims 23-24*

Applicant respectfully traverses the rejection. Claims 23-24 are dependent on claim 21, which is not rejected under 35 U.S.C. §102(e). Applicant respectfully submits that because claim 23-24 includes each and every element of claim 21, they cannot be anticipated by Daum if claim 21 is not anticipated by Daum.

Applicant respectfully requests reconsideration and allowance of claims 23-24.

*Claim 25*

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a *prima facie* case of anticipation because the cited portions of Daum do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Daum, among other things, a teaching or suggestion of identifying a first relationship between a first ventilation rate and a second ventilation rate, and generating a code as a function of the first relationship, as recited in claim 25.

The Office action does not indicate, and Applicant is unable to find in Daum, that the alleged processor of Daum identifies the relationship between the ventilation rates and generates the code as the function of the relationship, as recited in claim 25. The Office Action states, in paragraph 7, that “Daum discloses a system that includes ... a processor adapted to identify the relationship between impedances ... (Col. 1, l. 67 & Col. 2, ll. 3-11)”. However, ventricular rates as recited in claim 25 are not equivalent to impedances, and Applicant is unable to find a relationship between ventilation rates from the cited portions of Daum. A clarification in the next official communication is respectfully requested, or withdrawal of the rejection is believed appropriate.

Applicant respectfully requests reconsideration and allowance of claim 25.

*Claims 26 and 28*

Applicant respectfully traverses the rejection. Claims 26 and 28 are dependent on claim 25, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 25 is incorporated herein to support the patentability of claims 26 and 28.

Applicant respectfully requests reconsideration and allowance of claims 26 and 28.

*Claim 29*

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a *prima facie* case of anticipation because the cited portions of Daum do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Daum, among other things, a teaching or suggestion of a processor adapted to identify a similarity between a first ventilation signal and a second ventilation signal and store a code having a value based on the similarity, as recited in claim 29.

The Office action does not indicate, and Applicant is unable to find in Daum, that the alleged processor of Daum identifies the similarity between ventilation signals and stores the code having the value based on the similarity, as recited in claim 29. The Office Action states, in paragraph 7, that “Daum discloses a system that includes ... a processor adapted to identify the relationship between impedances ... (Col. 1, 1. 67 & Col. 2, ll. 3-11)”. However, relationship is not equivalent to similarity, and Applicant is unable to find a similarity between the ventilation signals from the cited portions of Daum. A clarification in the next official communication is respectfully requested, or withdrawal of the rejection is believed appropriate.

Applicant respectfully requests reconsideration and allowance of claim 29.

*Claims 30-34*

Applicant respectfully traverses the rejection. Claims 30-34 are dependent on claim 29, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 29 is incorporated herein to support the patentability of claims 30-34.

Applicant respectfully requests reconsideration and allowance of claims 30-34.

*Claim 38*

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a *prima facie* case of anticipation because the cited portions of Daum do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Daum, among other things, a teaching or suggestion of comparing a first signal and a second signal, delivering a first therapy regimen to the heart if a similarity is detected in the comparing, and receiving a third signal based on activity of the heart and delivering a second therapy regimen to the heart if the similarity is not detected in the comparing, the third signal received from a third sensor and the second therapy regimen selected as a function of the third signal, as recited in claim 38.

The Office action does not indicate, and Applicant is unable to find in Daum, how Daum provides delivering a first therapy regimen to the heart if a similarity is detected in the comparing the first and second signals, as recited in claim 38. The Office Action states, in paragraph 7, that “Daum discloses a system that includes ... a processor adapted to identify the relationship between impedances ... (Col. 1, l. 67 & Col. 2, ll. 3-11)”. However, relationship is not equivalent to similarity, and Applicant is unable to find a similarity between the signals from the cited portions of Daum. A clarification in the next official communication is respectfully requested, or withdrawal of the rejection is believed appropriate.

Applicant respectfully requests reconsideration and allowance of claim 38.

*Claims 39-40 and 44-45*

Applicant respectfully traverses the rejection. Claims 39-40 and 44-45 are dependent on claim 38, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 38 is incorporated herein to support the patentability of claims 39-40 and 44-45.

Applicant respectfully requests reconsideration and allowance of claims 39-40 and 44-45.

*Claim 46*

Claim 46 has been amended to more clearly describe the recited subject matter.

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a *prima facie* case of anticipation because the cited portions of Daum do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Daum, among other things, a teaching or suggestion of using a processor to detect a similarity between signals of the plurality of input signals, and delivering therapy to the heart based on the detected similarity, as recited in claim 46.

The Office action does not indicate, and Applicant is unable to find in Daum, how the alleged processor of Daum is used to detect the similarity between the signals, as recited in claim 46. The Office Action states, in paragraph 7, that “Daum discloses a system that includes … a processor adapted to identify the relationship between impedances … (Col. 1, l. 67 & Col. 2, ll. 3-11)”. However, relationship is not equivalent to similarity, and Applicant is unable to find a similarity between the signals from the cited portions of Daum. A clarification in the next official communication is respectfully requested, or withdrawal of the rejection is believed appropriate.

Applicant respectfully requests reconsideration and allowance of claim 46.

*Claims 51-52*

Applicant respectfully traverses the rejection. Claims 51-52 are dependent on claim 46, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 46 is incorporated herein to support the patentability of claims 51-52.

Applicant respectfully requests reconsideration and allowance of claims 51-52.

*Claim 53*

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a *prima facie* case of anticipation because the cited portions of Daum do not provide the recited subject matter. For example, Applicant is unable to find in the cited portions of Daum, among other things, a teaching or suggestion of processor means adapted to generate a code as a

function of a detected similarity between a first ventilation signal, a second ventilation signal and a first acceleration signal, as recited in claim 53.

The Office action does not indicate, and Applicant is unable to find in Daum, that the alleged processor of Daum generates the code as the function of the detected similarity between the first ventilation signal, the second ventilation signal, and the first acceleration signal, as recited in claim 53. The Office Action states, in paragraph 7, that “Daum discloses a system that includes … a processor adapted to identify the relationship between impedances … (Col. 1, l. 67 & Col. 2, ll. 3-11)”. However, relationship is not equivalent to similarity, and Applicant is unable to find a similarity between the signals from the cited portions of Daum. A clarification in the next official communication is respectfully requested, or withdrawal of the rejection is believed appropriate.

Applicant respectfully requests reconsideration and allowance of claim 53.

*Claim 55*

Applicant respectfully traverses the rejection. Claim 55 is dependent on claim 53, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 53 is incorporated herein to support the patentability of claim 55.

Applicant respectfully requests reconsideration and allowance of claim 55.

§103 Rejection of the Claims

Claims 7-8, 12, 17-18, 21-24, 27, 35-37, 41-43, 47-50, and 54 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Daum in view of Hine.

Applicant respectfully submits that Daum is not available for combination in obviousness rejections pursuant to 35 U.S.C. § 103(c). The discussion above regarding the obviousness rejection of claims 1-6, 9-11, 13-16, 19-20, 23-26, 28-34, 38-40, 44-46, 51-53 and 55 are incorporated herein to support the patentability of claims 7-8, 12, 17-18, 21-24, 27, 35-37, 41-43, 47-50, and 54.

Applicant respectfully requests reconsideration and allowance of claims 7-8, 12, 17-18, 21-24, 27, 35-37, 41-43, 47-50, and 54.

**AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111**

Serial Number: 10/696,729

Filing Date: October 29, 2003

Title: CROSS-CHECKING OF TRANSTHORACIC IMPEDENCE AND ACCELERATION SIGNALS

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Dkt: 279.652US1

**CONCLUSION**

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 373-6965 to facilitate prosecution of this application.

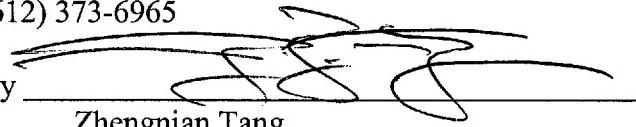
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Respectfully submitted,

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4-12-2007

**CERTIFICATE UNDER 37 CFR 1.8:** The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 12 day of April 2007.

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